Appendix 1: RCT invitation letter, Informed consent and information sheet, questionnaires

Invitation letter

Dear researcher,

My Name is Dana Hawwash, a PhD student at the faculty of Food technology, safety and health, Ghent University. I work on developing tools and guidelines to improve the quality of nutritional epidemiology research. I am inviting you to participate in a trial to assess the use of reporting guidelines during the manuscript writing process. The intervention aims to understand researcher's experience with the reporting guidelines and to produce recommendations that are aligned with researcher's needs.

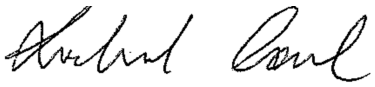
If you agree to participate, you will be asked to participate during the intervention day in May 4th 2018. The study will take an hour of your time testing two methods of applying reporting guidelines on a manuscript you are currently writing. There will be no follow up (see the attached information sheet for detailed information on the study). We ask you kindly to be let us know when you can be present on the day (we will be at the computer lab the whole day). If the date and time doesn't suit you, we can arrange a personalized testing day. Note that we will not collect the paper that you are working on and only request general information (i.e. working title and type of study). All information collected will also be confidential.

The study was presented to the ethics committee in Belgium, namely the Ethics Committee of the University Hospital in Ghent for review. No approval was required under the Belgian law. Your privacy and anonymity will be guaranteed. Only a researcher assisting in the processing of the data and the principal investigator will have access to names of the participants.

If you are interested in participating, please send me an email at dana.hawwash@ugent.be

Thank you for your time.

Kind regards,



Principal Investigator
Dana Hawwash
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1. PARTICIPANT INFORMATION SHEET

Integrating a Writing Aid to Facilitate the Use of Reporting Guidelines A Cross Over Randomized Controlled Trial

Coordinating Investigator: Prof. Carl Lachat

Principal Investigator: Dana Hawwash

Dear Researcher,

You are invited to participate in a study that wants to study the usefulness of providing a writing aid during the writing of a scientific manuscript. Before you decide to participate in this study, it is good to read this form as it explains the study clearly and states your rights and our responsibilities.

PURPOSE AND DESCRIPTION OF THE STUDY

This research study will provide more evidence and insight on how to improve the reporting quality of manuscripts in biomedical research. We want to compare the effect of testing two different tools on a manuscript you are currently busy writing. One approach is to fill a MS word table and the other approach is the writing aid we have developed. The MS word document is what you normally fill when you need to submit a reporting guideline at endorsing journals. It is expected that the writing aid that we will give to you as part of the study participation will support the completeness of the reporting of scientific papers. It is worth noting that the tool serves no commercial benefits, and it will be published open access.

HOW THE STUDY IS DONE

The study is a cross over design meaning you will enjoy testing and giving feedback on both tools with a break in between. In the break, some refreshment will be served.

The study consists of 4 steps:

1- Filling a 3 minutes baseline questionnaire,
2- Testing the first tool on your manuscript and filling a 3 minutes feedback questionnaire on the first tool
3- Break
4- Testing the second tool on your manuscript and giving feedback on the second tool (filling a 4mminutes feedback questionnaire)

VOLUNTARY PARTICIPATION

Your participation is entirely voluntarily in this study. You have the right to refuse to participate in the study without explanation. You also have the right yourself to stop your participation in the study at any time, even after you have signed this informed consent form.

INCONVENIENCES

The study will take an hour of your time and will be conducted using the University computer facilities

BENEFITS

We can arrange a personalized test, at your own faculty, suiting your free time.

You will receive the tools developed for free, and any needed consultation regarding their use (we can arrange a Skype call or a face to face meeting if you are in Gent)

We expect to show that using writing aid can increase the completeness of scientific manuscripts, and thus aim to support researchers by developing user-friendly tool that can be integrated in the research flow.

PROTECTION OF YOUR PRIVATE LIFE

Your identity and your participation in this study will be treated strictly confidential. The specific information we obtain from you (email address and title of the study) will not be shared with anybody, except the study investigators. Your identity remains secret since your personal information will only be designated by a unique participant number. Your name will not appear in any reports or publication resulting from this study. After the study is completed, you may request information about the study results.

ETHICS COMMITTEE

The study was presented to the ethics committee in Belgium, namely the Ethics Committee of the University Hospital in Ghent for review. No approval was required under the Belgian law

CONTACT PERSONS IN CASE YOU HAVE QUESTIONS ABOUT THIS STUDY

If you have any questions concerning your participation in this study, you can always contact dana.hawwash@ugent.be

Informed consent form

Before you agree to participate in this study, you need to be aware that:

- The study was presented to the ethics committee in Belgium, namely the Ethics Committee of the University Hospital in Ghent for review. No approval was required under the Belgian law
- This clearance is not to be taken as an obligation to take part in this study.
- Your participation is only voluntary. If you wish, you can withdraw from this study at any point, even after providing consent. You can withdraw by contacting the researchers through email or telephone. You do not have to motivate or explain the decision of withdrawal. Your data will be discarded and not be used in the analysis
- You can revise your answers to the questions before submission if you wish so, once the answers are submitted they cannot be changed.
- Your input will be stored anonymously; researchers not involved in the data collection will not have access to your personal data and name.
- You can contact the researcher or the coordinator of the project at any time if you wish to obtain more information regarding this study.

I declare that I have been informed about the purpose of this study and understand that I can refuse to answer a particular question and withdraw when I like. My name won't be associated in any publication with the collected information. I accept that there is neither remuneration nor direct benefit for me.
My consent will be confirmed by clicking this link to the online questionnaire

Principal Investigator
Dana Hawwash
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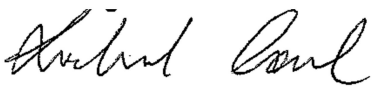
Appendix 6

What are Reporting Guidelines?



- Authors of scientific articles commonly neglect to include important details about the studies they have done. This information is considered essential for the readers to know and understand what and how things were done. Although authors might have the needed information, not reporting them in the study can lead to their studies being redeemed useless.
- To increase transparency and completeness of research manuscripts, research-reporting guidelines are developed. Research reporting guidelines are tools for authors and reviewers to ensure the presences of certain information that can add clarity on how the research was done, and how the results were obtained.
- Reporting guidelines are mainly organized as a checklist, explicit text, a flow diagram or a combination between these three elements.
- An example of an item on the reporting guideline:

  Title - #1a - Indicate the study's design with a commonly used term in the title or the abstract

- The checklist commonly organizes the items that need to be reported according to the typical sections of a research paper (title and abstract, introduction, methods, results, discussion, other information)
- It is essential to clearly describe how things were done in a study, therefore, if an item that is asked to be reported was not considered; it is important to report that it was not done in the paper
- It is important to note that reporting guidelines and checklists are tools to help researchers and should in no way restrict writing style or interfere with the editorial or review process.

Appendix 3 Baseline questionnaire

Dear researcher

Thank you for accepting our invitation to participate in our study. Before the start of the trial, please complete this baseline questionnaire. The questionnaire should not take more than 5 minutes of your time.

Informed Consent

☐ I declare that I have been informed about the purpose of this study and understand that I can refuse to answer a particular question and withdraw when I like. My name won't be associated in any publication with the collected information. I accept that there is neither remuneration nor direct benefit for me.

General information

Before filling the questionnaire, please provide the following details

Full name:

Email:

Picked number:

The current working title of the paper (we understand that title can be modified at a later stage)

Research experience:

-PhD student

-Post Doc

-Professor

☐ I confirm that I am in charge of writing the first version of the manuscript

Q1 What is your affiliation regarding the current unpublished paper

- First author (1)
- Co-author (2)
- Senior author (3)
- Principal investigator (4)

Q2 What is your thesis/ current unpublished paper focused on

- Systematic review
- Randomized controlled studies
- Observational studies (cross sectional, cohort, case-control)

If systematic review, are you using PRISMA guidelines while writing this study?

If Randomized controlled trial, are you using the CONSORT guidelines while writing this study?

If Observational studies, are you using the STROBE guidelines while writing this study?

Q3 Have you used a reporting guideline like PRISMA, CONSORT or STROBE before? (Tick all those that apply)

- Yes, to write or co-write a paper (1), specify which guidelines
- Yes, to review a paper (2), specify which guidelines
- No, it will be my first time to use reporting guidelines (3)

If answer is yes to the above question, then this question will show up

In General, how often do you use reporting guidelines?

Never Rarely Sometimes Usually Every time

Q4 What motivated you to use the guideline?

- Self motivation or motivation from colleagues or co-authors
- Journal suggestions to use checklists within the writing process
- Journal requirements to fill the checklist at the end
- Journal requirements during peer reviewing

Subjective knowledge

The following questions only apply to PRISMA, CONSORT, STROBE and STROBE nut

Q5 A) How do you rank your knowledge with respect to the utilization of the reporting guideline?

- Very knowledgeable
- Somewhat knowledgeable
- Neither knowledgeable nor unknowledgeable
- Somewhat knowledgeable
- Very unknowledgeable

Q5 B) how do you rank your knowledge with respect to the content of the reporting guideline?

- Very knowledgeable
- Somewhat knowledgeable
- Neither knowledgeable nor unknowledgeable
- Somewhat knowledgeable
- Very unknowledgeable

Objective knowledge

The following questions only apply to PRISMA, CONSORT, STROBE and STROBE nut

Q6 Answer the following statement with true or false

- The reporting guidelines should be used to evaluate the quality of papers
- The reporting guideline must be completely filled with existing information in my paper, or my paper will be rejected
- It is not acceptable to report that some items on the checklist are not applicable to my study
- Reporting on items that are not carried out will add more clarity to my paper and will not lead to rejection
- The reporting guidelines aim to make reporting more clear, complete and transparent
- Reporting guidelines were developed to improve communication between the co-authors

Evaluation questionnaire 1 (arm 2 recieved similar questionnaire q1 was not asked, all other questions were modified)

General information

Before filling the questionnaire, please provide the following details

Picked number

Checklist used:

- CONSORT
- PRISMA
- STROBE
- STROBE nut

Q 1 Have you encountered technical problems with using the writing aid that stopped you from further use of the tool during manuscript writing? Feel free to explain in the blank space

- Yes----------
- No ----------

Q2) Which sentence describes best how you used the reporting guideline?

- I tagged only one section
- I tagged a few sections of the paper using the checklist
- I used the checklist to tag the whole paper

Q3) Which sections of the paper have you tagged? You can check more than one

- Title and Abstract
- Introduction
- Methods
- Results
- Discussion
- Other information (including funding)

Q4 Perceived Usefulness

1. I anticipate that continuous use of the reporting guideline software (as a writing aid and info box) will improve the completeness of information in my study

Likely Unlikely

Extremely Quite Slightly Neither Slightly Quite Extremely

2. I anticipate that continuous use of the reporting guideline software (as a writing aid and info box) during writing will increase my productivity.

Likely Unlikely

Extremely Quite Slightly Neither Slightly Quite Extremely

3. I anticipate that continuous use of the reporting guideline software (as a writing aid and info box) will enhance my effectiveness while writing my research paper.

Likely Unlikely

Extremely Quite Slightly Neither Slightly Quite Extremely

4. I find the reporting guideline software (as a writing aid and info box) useful to be applied as I continue writing the paper.

Likely Unlikely

Extremely Quite Slightly Neither Slightly Quite Extremely

Q5 Perceived Ease of Use

1. I founded it easy to get the reporting guideline software (the writing aid and info box) to guide me in writing the paper's sections.

Likely Unlikely

Extremely Quite Slightly Neither Slightly Quite Extremely

2. My interaction with the reporting guidelines software (the writing aid and info box) was clear and understandable.

Likely Unlikely

Extremely Quite Slightly Neither Slightly Quite Extremely

3. I founded the reporting guidelines software (the writing aid and info box) to be flexible to interact with (doesn't require a lot of my mental effort).

Likely Unlikely

Extremely Quite Slightly Neither Slightly Quite Extremely

4. I found the reporting guidelines software (the writing aid and info box) easy to use.

Likely Unlikely

Extremely Quite Slightly Neither Slightly Quite Extremely

Q6 Intention of use

a) Assuming I have access to the reporting guidelines software (the writing aid and info box)**, I intend to use it**

Likely Unlikely

Extremely Quite Slightly Neither Slightly Quite Extremely

b) Given access to the reporting guidelines software (the writing aid and info box)**, I predict that I would use it**

Likely Unlikely

Extremely Quite Slightly Neither Slightly Quite Extremely

c) I intend to **use the reporting guidelines** software (the writing aid and info box) **on my next manuscript:**

Likely Unlikely

Extremely Quite Slightly Neither Slightly Quite Extremely

d) Even if the journal does not formally require it, I u plan on using the reporting guidelines software (the writing aid and info box) more systematically in the future for other publications

Likely Unlikely

Extremely Quite Slightly Neither Slightly Quite Extremely

Q7 How you intent to use the reporting guidelines (the writing aid and info box) **on your next manuscript, please explain in the blank spaces:**

- As, it is
- I will make major revisions
- I will make minor revisions
- No
- Unsure

Evaluation questionnaire 2 (arm 2 received similar questionnaire q3 and q4 were modified)

General information

Before filling the questionnaire, please provide the following details

Number picked

Q1) Which sentence describes best how you used the reporting guideline?

- I filled the MS word table document only for one section
- I filled the MS word table for a few sections of the paper
- I filled the entire MS word table for all the sections of the paper

Q3) Which sections of the paper have you tagged? You can check more than one

- Title and Abstract
- Introduction
- Methods
- Results
- Discussion
- Other information (including funding)

Q4 Perceived Usefulness

I anticipate that continuous use of the reporting guideline documents (as a MS word table and elaboration and explanation document) will improve the completeness of information in my study

Likely Unlikely

Extremely Quite Slightly Neither Slightly Quite Extremely

1. I anticipate that continuous use of the reporting guideline documents (as a MS word table and elaboration and explanation document) during writing will increase my productivity.

Likely Unlikely

Extremely Quite Slightly Neither Slightly Quite Extremely

2. I anticipate that continuous use of the reporting guideline documents (as a MS word table and elaboration and explanation document) will enhance my effectiveness while writing my research paper.

Likely Unlikely

Extremely Quite Slightly Neither Slightly Quite Extremely

3. I find the reporting guideline documents (as a MS word table and elaboration and explanation document) useful to be applied as I continue writing the paper.

Likely Unlikely

Extremely Quite Slightly Neither Slightly Quite Extremely

Q5 Perceived Ease of Use

1. I founded it easy to get the reporting guideline documents (as a MS word table and elaboration and explanation document) to guide me in writing the paper's sections..

Likely Unlikely

Extremely Quite Slightly Neither Slightly Quite Extremely

2. My interaction with the reporting guidelines documents (as a MS word table and elaboration and explanation document) was clear and understandable.

Likely Unlikely

Extremely Quite Slightly Neither Slightly Quite Extremely

3. I founded the reporting guidelines documents (as a MS word table and elaboration and explanation document) to be flexible to interact with (doesn't require a lot of my mental effort).

Likely Unlikely

Extremely Quite Slightly Neither Slightly Quite Extremely

4. I found the reporting guidelines documents (as a MS word table and elaboration and explanation document) easy to use.

Likely Unlikely

Extremely Quite Slightly Neither Slightly Quite Extremely

Q6 Intention of use

a) Assuming I have access to the reporting guidelines documents (as a MS word table and elaboration and explanation document)**, I intend to use it**

Likely Unlikely

Extremely Quite Slightly Neither Slightly Quite Extremely

b) Given access to the reporting guidelines documents (as a MS word table and elaboration and explanation document)**, I predict that I would use it**

Likely Unlikely

Extremely Quite Slightly Neither Slightly Quite Extremely

c) Do you intent to use the reporting guidelines documents (as a MS word table and elaboration and explanation document) **on your next manuscript:**

Likely Unlikely

Extremely Quite Slightly Neither Slightly Quite Extremely

d) Even if the journal does not formally require it, do you plan on using the reporting guidelines documents (the writing aid and info box) more systematically in the future for other publications?

Likely Unlikely

Extremely Quite Slightly Neither Slightly Quite Extremely

Q7 How do you intend to use the reporting guidelines (as a MS word table and elaboration and explanation document) **on your next manuscript: Feel free to fill in the blank space**

- As, it is
- I will make major revisions
- I will make minor revisions
- I will not use it
- Unsure I will use it

Q8) Do you think that filling in the items in the checklist in this part of the study is easier because you have already filled it with the same information in the previous stage? Feel free to explain in the blank space

- Yes _____
- No _____

Q9) State your method of preference to apply the reporting checklist (as a MS word table and elaboration and explanation document)

- The reporting guidelines (as a MS word table and elaboration and explanation document)
- The reporting guidelines (as the writing Aid Software Package)

Q10 Please write your email address here so we can send you the installer zip folder for free

Q11 Would you like to be contacted for further information or findings of this study?